INVENTOR SEARCH

=> d ibib abs l3 1-2

L3 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:927129 HCAPLUS Full-text
TITLE: Regulated attenuation of live vaccines to enhance cross protective immunogenicity
INVENTOR(S): Curtiss, Roy III
PATENT ASSIGNEE(S): Washington University, USA
SOURCE: PCT Int. Appl.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003096812	A1	20031127	WO 2003-US11802	20030415
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2526895	A1	20031127	CA 2003-2526895	20030415
AU 2003235457	A1	20031202	AU 2003-235457	20030415
EP 1499191	A1	20050126	EP 2003-721711	20030415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20060233829	A1	20061019	US 2005-511616	20051115
PRIORITY APPLN. INFO.:			US 2002-372616P	P 20020415
			US 2002-373626P	P 20020418
			WO 2003-US11802	W 20030415

AB A live attenuated derivative of a pathogenic bacterium intended for use as a vaccine.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:469825 HCAPLUS Full-text
DOCUMENT NUMBER: 115:69825
ORIGINAL REFERENCE NO.: 115:12050h,12051a
TITLE: Cross-protective Salmonella vaccines using multiply mutant S. typhimurium
INVENTOR(S): Curtiss, Roy, III; Munson, Maryann
PATENT ASSIGNEE(S): Washington University, USA
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9106317	A1	19910516	WO 1990-US6503	19901102
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2072633	A1	19910504	CA 1990-2072633	19901102
AU 9067371	A	19910531	AU 1990-67371	19901102
EP 500699	A1	19920902	EP 1990-917076	19901102
EP 500699	B1	19980610		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
JP 05504331	T	19930708	JP 1990-515888	19901102
AT 167061	T	19980615	AT 1990-917076	19901102
PRIORITY APPLN. INFO.:			US 1989-431597 A	19891103
			WO 1990-US6503 A	19901102

AB Attenuated Salmonella for use as live vaccines against Salmonella and other Gram-neg. bacteria are prepared The organisms are incapable of manufacturing the lipopolysaccharide involved in pathogenesis because of mutation in several genes involved in the synthesis of, or regulation of synthesis of, the lipopolysaccharide. Other genes involved in the regulation of pathogenesis-related genes are also inactivated. A S. typhimurium with the crp and cya genes deleted was prepared by transposon mutagenesis with Tn10. S. typhimurium carrying both deletions had an LD50 of >109 colony-forming units (CFU) in Leghorn chicks, vs. 2 + 104 - 2 + 105 for wild-types. Similar deletions of the phoP, fur, pmi, and galE genes were constructed. Some of the constructs prepared were found to confer cross-resistance to S. enteriditis and pathogenic Escherichia coli.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

RESULTS FROM SEARCHES IN CAPLUS, MEDLINE, BIOSIS, EMBASE, AND DRUGU

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=> d que stat l21
L5       182203 SEA FILE=HCAPLUS ABB=ON  ?SALMONELLA? OR E(W)?COLI?
L6        33841 SEA FILE=HCAPLUS ABB=ON  L5 AND (?LIVE? OR ?ATTENUAT? OR
                 ?DERIV?)
L7          744 SEA FILE=HCAPLUS ABB=ON  L6 AND ?REGULAT?(5A)?EXPRES?
L8          744 SEA FILE=HCAPLUS ABB=ON  L7 AND (?REGULAT? OR ?PROMOT? OR FUR
                 OR ?INTEST? OR ?EXPRES?)
L9          189 SEA FILE=HCAPLUS ABB=ON  L8 AND (?CARBOHYDRAT?(W)?ANTIGEN? OR
                 IN(W)?VIVO? OR ?CROSS?(W)?PROTECT? OR ?IMMUN?)
L11          21 SEA FILE=HCAPLUS ABB=ON  L9 AND LPS
L12           1 SEA FILE=HCAPLUS ABB=ON  L11 AND O(W)?ANTIGEN?
L14           1 SEA FILE=HCAPLUS ABB=ON  L9 AND PMI
L16          22 SEA FILE=HCAPLUS ABB=ON  L11 OR L12 OR L14
L17          18 SEA FILE=HCAPLUS ABB=ON  L16 AND (PRD<20070418 OR PD<20070418)
L18         114 SEA L17
L19         114 SEA L18 AND (LPS OR PMI)
L20           3 SEA L19 AND O(W) ?ANTIGEN?
L21          21 DUP REMOV L17 L20 (0 DUPLICATES REMOVED)


=> d ibib abs l21 1-21

L21  ANSWER 1 OF 21     MEDLINE on STN
ACCESSION NUMBER:   2007442012     MEDLINE  Full-text
DOCUMENT NUMBER:    PubMed ID: 17629369
TITLE:              Core-linked LPS expression of Shigella
                    dysenteriae serotype 1 O-antigen in
                    live Salmonella Typhi vaccine vector
                    Ty21a: preclinical evidence of immunogenicity and
                    protection.
AUTHOR:             Xu De Qi; Cisar John O; Osorio Manuel; Wai Tint T; Kopecko
                    Dennis J
CORPORATE SOURCE:   Laboratory of Enteric and Sexually Transmitted Diseases,
                    FDA-CBER, Bethesda, MD 20892, United States..
                    dennis.kopecko@fda.hhs.gov
SOURCE:             Vaccine, (2007 Aug 14) Vol. 25, No. 33, pp.
                    6167-75.  Electronic Publication: 2007-06-26.
                    Journal code: 8406899. ISSN: 0264-410X.
PUB. COUNTRY:       Netherlands
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
                    (RESEARCH SUPPORT, N.I.H., INTRAMURAL)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200712
ENTRY DATE:         Entered STN: 31 Jul 2007
                    Last Updated on STN: 11 Dec 2007
                    Entered Medline: 6 Dec 2007
AB    Shigella dysenteriae serotype 1 (S. dysenteriae 1) causes severe shigellosis
      that is typically associated with high mortality.  Antibodies against Shigella
      serotype-specific O-polysaccharide (O-Ps) have been shown to be host
      protective.  In this study, the rfb locus and the rfp gene with their cognate
      promoter regions were PCR-amplified from S. dysenteriae 1, cloned, and
      sequenced.  Deletion analysis showed that eight rfb ORFs plus rfp are
      necessary for biosynthesis of this O-Ps.  A tandemly-linked rfb-rfp gene
      cassette was cloned into low copy plasmid pGB2 to create pSd1.  Avirulent
      Salmonella enterica serovar Typhi (S.  Typhi) Ty21a harboring pSd1 synthesized
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S. Typhi 9, 12 LPS as well as typical core-linked S. dysenteriae 1 LPS. Animal immunization studies showed that Ty21a (pSd1) induces protective immunity against high stringency challenge with virulent S. dysenteriae 1 strain 1617. These data further demonstrate the utility of S. Typhi Ty21a as a live, bacterial vaccine delivery system for heterologous O-antigens, supporting the promise of a bifunctional oral vaccine for prevention of shigellosis and typhoid fever.

L21 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1056021 HCAPLUS Full-text
DOCUMENT NUMBER: 145:354218
TITLE: Down-regulation of key virulence factors makes the Salmonella enterica serovar Typhimurium rfaH mutant a promising live-attenuated vaccine candidate
AUTHOR(S): Nagy, Gabor; Danino, Vittoria; Dobrindt, Ulrich; Pallen, Mark; Chaudhuri, Roy; Emody, Levente; Hinton, Jay C.; Hacker, Jorg
CORPORATE SOURCE: Department of Medical Microbiology and Immunology, University of Pecs, Pecs, 7624, Hung.
SOURCE: Infection and Immunity (2006), 74(10), 5914-5925
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mutants of Salmonella enterica serovar Typhimurium that lack the transcriptional regulator RfaH are efficient as live oral vaccines against salmonellosis in mice. The authors show that the attenuation of the vaccine candidate strain is associated with reduced net growth in epithelial and macrophage cells. To identify the relevant RfaH-dependent genes, the RfaH regulon was determined with S. enterica serovars Enteritidis and Typhimurium using whole-genome Salmonella microarrays. As well as impacting the expression of genes involved in lipopolysaccharide (LPS) core and O- antigen synthesis, the loss of RfaH results in a marked down- regulation of SPI-4 genes, the flagellum/chemotaxis system, and type III secretion system 1. However, a proportion of these effects could have been the indirect consequence of the altered expression of genes required for LPS biosynthesis. Direct and indirect effects of the rfaH mutation were dissociated by genome-wide transcriptional profiling of a structural deep-rough LPS mutant (waaG). The authors show that truncation of LPS itself is responsible for the decreased intracellular yield observed for ΔrfaH strains. LPS mutants do not differ in replication ability; rather, they show increased susceptibility to antimicrobial peptides in the intracellular milieu. Evidence that deletion of rfaH, as well as some other genes involved in LPS biosynthesis, results in enhanced invasion of various mammalian cells is shown. Exposure of common minor antigens in the absence of serovar-specific antigens might be responsible for the observed cross-reactive nature of the elicited immune response upon vaccination. Increased invasiveness of the Salmonella rfaH mutant into antigen-presenting cells, combined with increased intracellular killing and the potential for raising a cross-protective immune response, renders the rfaH mutant an ideal vaccine candidate. OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)
REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:156747 HCAPLUS Full-text
DOCUMENT NUMBER: 145:410249
TITLE: Immunostimulatory CpG-oligodeoxynucleotides

(CpG-ODN) induce early hepatic injury, but provide a late window for protection against endotoxin-mediated liver damage

AUTHOR(S): Slotta, Jan E.; Scheuer, Claudia; Menger, Michael D.; Vollmar, Brigitte

CORPORATE SOURCE: Institute for Clinical and Experimental Surgery, University of Saarland, Homburg/Saar, 66421, Germany

SOURCE: Journal of Hepatology (2006), 44(3), 576-585
CODEN: JOHEEC; ISSN: 0168-8278

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An impaired immunol. response to infection has been recognized as a major defect in the pathogenesis of sepsis and multi-organ failure. Sepsis-associated liver dysfunction and damage are main determinants for the course of the disease. CpG-motif-containing DNA-sequences (CpG-ODN) were previously shown to confer protection in models of infection by stimulating both innate and specific immune responses. Herein, the authors studied the effect of CpG-ODN in lipopolysaccharide (LPS)-associated hepatotoxicity. Sprague Dawley rats pre-treated at day 6 with either CpG-ODN or inert DNA were challenged with E. coli LPS and subsequently studied for liver injury at 6 and 16 h using in vivo fluorescence microscopy and immunohistochem. Western blot protein anal. served for assessment of expression of TLR4, TNF receptor-associated factor 6 (TRAF6), NFκB, and caspase-3. To evaluate CpG-ODN effects during non-septic conditions, addnl. animals were solely exposed to CpG-ODN and studied after 1 and 6 days. CpG-ODN application induced marked hepatic microcirculatory deterioration and liver dysfunction at day 1, however, with almost complete recovery to normal at day 6. Interestingly, CpG-ODN pre-treatment decreased LPS -induced leukocyte-endothelial cell interaction, sinusoidal perfusion failure, and caspase-3-dependent apoptotic cell death. Although Kupffer cell phagocytic activity was not affected, CpG-ODN pre-treatment in LPS-challenged animals attenuated hepatic protein expression of TRAF6 and NFκB and increased TLR4 by almost 100%. Thus, CpG-containing DNA-sequences induce early hepatic injury, but mediate long-term protection against LPS hepatotoxicity. The mechanism of protection is based on the induction of cross-tolerance, probably via inhibition of the downstream TRAF6-NFκB signaling pathway and upregulation of the TLR4 surface receptor. OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:427114 HCAPLUS Full-text

DOCUMENT NUMBER: 143:58451

TITLE: Insect renal tubules constitute a cell-autonomous immune system that protects the organism against bacterial infection

AUTHOR(S): McGettigan, J.; McLennan, R. K. J.; Broderick, K. E.; Kean, L.; Allan, A. K.; Cabrero, P.; Regulski, M. R.; Pollock, V. P.; Gould, G. W.; Davies, S.-A.; Dow, J. A. T.

CORPORATE SOURCE: Division of Molecular Genetics, Institute of Biomedical and Life Sciences, University of Glasgow, Glasgow, G12 8QQ, UK

SOURCE: Insect Biochemistry and Molecular Biology (2005), 35(7), 741-754
CODEN: IBMBES; ISSN: 0965-1748

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English
AB Innate immunity is a widespread and important defense against microbial attack, which in insects is thought to originate mainly in the fat body. Here we demonstrate that the fluid-transporting Malpighian (renal) tubule of Drosophila melanogaster constitutes an autonomous immune-sensing tissue utilizing the nitric oxide (NO) signaling pathway. Reverse transcriptase PCR (RT-PCR) shows that tubules express those genes encoding components of the Imd pathway. Furthermore, isolated tubules bind and respond to lipopolysaccharide (LPS), by upregulating anti-microbial peptide (diptericin) gene expression and increased bacterial killing. Excised, LPS-challenged tubules, as well as tubules from LPS-infected flies, display increased NO synthase (NOS) activity upon immune challenge. Targetted expression of a Drosophila NOS (dNOS) transgene to only principal cells of the tubule main segment using the GAL4/UAS system increases diptericin expression . In live flies, such targeted over-expression of dNOS to tubule principal cells confers increased survival of the whole animal upon E. coli challenge. Thus, we describe a novel role of Malpighian tubules in immune sensing and insect survival.
OS.CITING REF COUNT: 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:674510 HCAPLUS Full-text
DOCUMENT NUMBER: 143:246658
TITLE: Activation of murine dendritic cells and macrophages induced by Salmonella enterica serovar Typhimurium
AUTHOR(S): Kalupahana, Ruwani Sagarika; Mastroeni, Pietro; Maskell, Duncan; Blacklaws, Barbara Ann
CORPORATE SOURCE: Centre for Veterinary Science, Department of Veterinary Medicine, University of Cambridge, Cambridge, UK
SOURCE: Immunology (2005), 115(4), 462-472
CODEN: IMMUAM; ISSN: 0019-2805
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Macrophages and dendritic cells (DCs) are antigen-presenting cells (APCs), and the direct involvement of both cell types in the immune response to Salmonella has been identified. In this study the authors analyzed the phenotypic and functional changes that take place in murine macrophages and DCs in response to live and heat-killed Salmonella enterica serovar Typhimurium. Both types of cell secreted proinflammatory cytokines and nitric oxide (NO) in response to live and heat-killed salmonellae. Bacterial stimulation also resulted in up-regulation of costimulatory mols. on macrophages and DCs. The expression of major histocompatibility complex (MHC) class II mols. by macrophages and DCs was differentially regulated by interferon (IFN)-γ and salmonellae. Live and heat-killed salmonellae as well as lipopolysaccharide (LPS) inhibited the up-regulation of MHC class II expression induced by IFN-γ on macrophages but not on DCs. Macrophages as well as DCs presented Salmonella -derived antigen to CD4 T cells, although DCs were much more efficient than macrophages at stimulating CD4 T-cell cytokine release. Macrophages are effective in the uptake and killing of bacteria while DCs specialize in antigen presentation. This study showed that the viability of salmonellae was not essential for activation of APCs but, unlike live bacteria, prolonged contact with heat-killed bacteria was necessary to obtain maximal expression of the activation markers studied.
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS

L21 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:864561 HCAPLUS Full-text
DOCUMENT NUMBER: 143:345201
TITLE: Role of nuclear transcription factor-κB in endotoxin-induced shock in rats
AUTHOR(S): Wang, Jin; Yang, Guangtian
CORPORATE SOURCE: Emergency Department, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, 430030, Peop. Rep. China
SOURCE: Journal of Huazhong University of Science and Technology, Medical Sciences (2005), 25(2), 174-177
CODEN: JHUSAW; ISSN: 1672-0733
PUBLISHER: Huazhong University of Science and Technology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To investigate the role of NF-κB in endotoxic shock in rats, the shock was induced by i.v. infusion of E. coli lipopolysaccharide (LPS). At 1 h, 2 h, 4 h, and 6 h after LPS injection, the activation of NF-κB in blood mononuclear cells and the content of TNF-α and IL-6 in plasma were detected by enzyme-linked immunoadsorbent assay (ELISA). The level of mean arterial pressure (MAP) and the histopathol. changes of lung and liver were also observed The activation of NF-κB in mononuclear cells increased 1 h after LPS injection and reached its peak 2 h after the injection, and its level was higher than in the normal group. The level of TNF-α was increased 1 h after the infusion and peaked 2 h after the injection, and its level was higher than that of normal group after LPS infusion. The content of IL-6 increased gradually with time, and the IL-6 level was higher than in the normal group after LPS injection. MAP decreased gradually with time and its level was lower than in the normal group after LPS injection. Pathol. examination showed that endotoxic shock could cause pulmonary alveolar hemorrhage, edema, and infiltration of inflammatory cells into lung, and congestion, edema, capillary dilation, and inflammatory cell infiltration in liver tissue. Thus, NF-κB can up-regulate the expression of TNF-α and IL-6 in plasma and therefore plays an important role in endotoxin-induced shock in rats.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:581386 HCAPLUS Full-text
DOCUMENT NUMBER: 143:324458
TITLE: Cytokine gene expression profiles of bovine dendritic cells after interaction with Mycobacterium avium ssp. paratuberculosis (M.a.p.), Escherichia coli (E. coli) or recombinant M.a.p. heat shock protein 70
AUTHOR(S): Langelaar, Merel F. M.; Weber, Corinna N.; Overdijk, Marije B.; Mueller, Kerstin E.; Koets, Ad P.; Rutten, Victor P. M. G.
CORPORATE SOURCE: Division of Immunology, Department of Infectious Diseases and Immunology, Faculty of Veterinary Medicine, Utrecht University, Utrecht, 3508 TD, Neth.
SOURCE: Veterinary Immunology and Immunopathology (2005), 107(1-2), 153-161
CODEN: VIIMDS; ISSN: 0165-2427
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Mycobacterium avium paratuberculosis (M.a.p.) resides and replicates in macrophages. Many of the of immune mechanisms aiding M.a.p. survival in the host's cells are known. However, little is known about interactions of M.a.p. with dendritic cells (DC). As DC are important for the induction of protective immunity against infectious diseases, we investigated the interaction of M.a.p. with these cells. Quant. real-time PCR (RT-PCR) was used to analyze differential expression of cytokine genes after 6 h and 24 h of incubation by immature DC that phagocytosed either M.a.p. or Escherichia coli (E . coli). We hypothesized that phagocytosis of E. coli would induce pro-inflammatory cytokines due to abundant presence of lipopolysaccharide (LPS) and that the cytokine expression profile induced by phagocytosis of live M.a.p. would differ. In addition we hypothesized that incubation of immature DC with rHsp70, an immunodominant antigen of M.a.p., would induce a similar profile of cytokine gene expression as phagocytosis of intact M.a.p. However, phagocytosis of both E. coli and M.a.p. resulted in a cytokine gene expression pattern representative of a (pro-)inflammatory reaction, dominated by strong induction of IL-12 gene expression, that was higher after 24 h than after 6 h of incubation, although the response to M.a.p. was less vigorous than to E. coli. Incubation with rHsp70 resulted in a more inhibitory type of cytokine gene expression, with delayed IL-12 gene expression and downregulation of the genes for IL-1β and IL-6 after 24 h of incubation. We conclude that bovine DC produce an immuno-stimulatory, anti-mycobacterial response to infection with M.a.p., while Hsp70 potentially contributes to pathogen virulence by allowing the bacteria to invade the host cell.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:759609 HCAPLUS Full-text

DOCUMENT NUMBER: 141:294659

TITLE: Expression of inflammatory and septic genes to identify antiinflammatory and antiseptic peptides for therapeutic use

INVENTOR(S): Hancock, Robert E. W.; Finlay, B. Brett; Scott, Monisha Gough; Bowdish, Dawn; Rosenberger, Carrie Melissa; Powers, Jon-Paul Steven

PATENT ASSIGNEE(S): Can.

SOURCE: U.S. Pat. Appl. Publ., 93 pp., Cont.-in-part of U.S. Pat. Appl. 2004 1,803.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 20040180038	A1	20040916	US 2003-661471	20030912	<--
US 20040001803	A1	20040101	US 2002-308905	20021202	<--
US 7507787	B2	20090324			
CN 101215601	A	20080709	CN 2007-10168028	20021202	<--
NZ 563261	A	20080829	NZ 2002-563261	20021202	<--
AU 2004271668	A1	20050324	AU 2004-271668	20040910	<--
CA 2538069	A1	20050324	CA 2004-2538069	20040910	<--
WO 2005025607	A1	20050324	WO 2004-CA1602	20040910	<--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1667707	A1	20060614	EP 2004-761766		20040910	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK						
CN 1901933	A	20070124	CN 2004-80031833		20040910	<--
JP 2007505048	T	20070308	JP 2006-525585		20040910	<--
ZA 2006002754	A	20070627	ZA 2006-2754		20040910	<--
US 20070190533	A1	20070816	US 2005-241882		20050929	<--
MX 2006002828	A	20060623	MX 2006-2828		20060310	<--
IN 2006DN01886	A	20070817	IN 2006-DN1886		20060324	<--
US 20070134261	A1	20070614	US 2006-400411		20060407	<--
KR 2007033314	A	20070326	KR 2006-706853		20060410	<--
AU 2007201885	A1	20070517	AU 2007-201885		20070427	<--
PRIORITY APPLN. INFO.:			US 2001-336632P	P	20011203	<--
			US 2002-308905	A2	20021202	<--
			AU 2002-365675	A3	20021202	<--
			CN 2002-827327	A3	20021202	<--
			NZ 2002-533721	A3	20021202	<--
			US 2003-661471	A	20030912	<--
			WO 2004-CA1602	W	20040910	<--
			US 2005-241882	A2	20050929	<--

AB A method of identifying a polynucleotide or pattern of polynucleotides regulated by one or more sepsis or inflammatory inducing agents and inhibited by a peptide is described. A method of identifying a pattern of polynucleotide expression for inhibition of an inflammatory or septic response. The method includes contacting human epithelial cells with LPS, LTA, CpG DNA and/or intact microbe or microbial components in the presence or absence of a cationic peptide; detecting a pattern of polynucleotide expression for the cells in the presence and absence of the peptide, wherein the pattern in the presence of the peptide represents inhibition of an inflammatory or septic response. Also included are compds. and agents identified by the methods of the invention. In another aspect, the invention provides methods and compds. for enhancing innate immunity in a subject. OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L21 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:	2005:16780 HCAPLUS Full-text
DOCUMENT NUMBER:	142:217022
TITLE:	Over-expression of AIF-1 in liver allografts and peripheral blood correlates with acute rejection after transplantation in rats
AUTHOR(S):	Nagakawa, Yuichi; Nomoto, Shuji; Kato, Yukihiko; Montgomery, Robert A.; Williams, George Melville; Klein, Andrew S.; Sun, Zhaoli
CORPORATE SOURCE:	Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD, USA
SOURCE:	American Journal of Transplantation (2004), 4(12), 1949-1957 CODEN: AJTMBR; ISSN: 1600-6135
PUBLISHER:	Blackwell Publishing Ltd.
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Early and accurate detection of acute cellular rejection (ACR) is important in the management of liver allograft recipients. We hypothesized that expression of allograft inflammatory factor (AIF)-1 would be associated with liver allograft rejection as previous studies have shown that a relationship exists between kidney and heart transplantation. Indeed using rat orthotopic transplant models we found that the expression of allograft inflammatory factor-1 (AIF-1) can be detected in both allograft and peripheral blood leukocytes with peak levels detected 7 days following liver transplantation. Interestingly, AIF-1 expression increased 2-fold in acutely rejecting liver allografts compared to chronically accepted livers on days 5, 7 and 10 after transplantation. AIF-1 expression in peripheral blood leukocytes was also significantly greater in the rejection model than in the acceptance model. Flow cytometric anal. of peripheral blood leukocytes demonstrated that AIF-1 was expressed in ED2-pos. cells, a marker for Kupffer cells. In vitro studies showed that AIF-1 expression in Kupffer cells was up-regulated by coculture with Th1 cytokines. However, neither LPS nor Escherichia colt (E. coli) administration had an affect on AIF-1 expression. These data indicate that high levels of AIF-1 expression reflect aggressive liver allograft rejection and suggest a role for monitoring AIF-1 in peripheral blood leukocytes as a monitor for increased immunosuppression. OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:558899 HCAPLUS Full-text
DOCUMENT NUMBER: 141:258441
TITLE: Implication of CpG-ODN and reactive oxygen species in the inhibition of intracellular growth of Salmonella typhimurium in hepatocytes
AUTHOR(S): Sanchez-Campillo, Maria; Chicano, Antonio; Torio, Alberto; Martin-Orozco, Elena; Gamiz, Pilar; Hernandez-Caselles, Trinidad; Garcia-Penarrubia, Pilar
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology B and Immunology, School of Medicine, University of Murcia, Murcia, 30100, Spain
SOURCE: Microbes and Infection (2004), 6(9), 813-820
CODEN: MCINFS; ISSN: 1286-4579
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bacterial DNA acts as an alert signal for eukaryotic cells through immunostimulatory CpG motifs. These sequences have therapeutic properties promoting protective immune TH1 responses and are recognized by a membrane protein belonging to the Toll-like receptor (TLR) family, named TLR-9. The aim of this study was to test the capability of murine hepatocytes to sense bacterial DNA and to develop antibacterial mechanisms against Salmonella typhimurium. The authors show that hepatocyte cell lines and mRNA exts. from murine liver constitutively express TLR-9, which is down- regulated by LPS and the mix of IFNγ, IL-1β and LPS. Also, the authors have found that hepatocyte cell lines can sense the presence of bacterial DNA and respond to it by increasing the pool of intracellular peroxides. This results in inhibition of intracellular growth of S. typhimurium when infected cells were incubated in the presence of CpG synthetic oligonucleotides (CpG-ODN). Expression of hepatocyte Mn-SOD is also induced by stimulation with CpG-oligodeoxynucleotides, LPS, and the mix of IFNγ, IL-1β and LPS. These results reinforce the prominent role of hepatocytes as a microbial product-responsive cell and the capabilities of CpG-ODN sequences as potent inducers of the innate immune response through the activation of a broad range of cell types.
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1164833 HCAPLUS Full-text
DOCUMENT NUMBER: 145:25990
TITLE: The context of host encounter with the flagellin protein, FliC, determines the direction of the T helper response
AUTHOR(S): Cunningham, A. F.; Toellner, K. M.; Serre, K.; Mohr, E.; Khan, M.; Ball, J.; MacLennan, I. C. M.
CORPORATE SOURCE: MRC Centre for Immune Regulation, University of Birmingham, Birmingham, UK
SOURCE: Immunology 2004, [12th International Congress of Immunology and 4th Annual Conference of FOCIS], Montreal, QC, Canada, July 18-23, 2004 (2004), E718C4131/1-E718C4131/4. Monduzzi Editore: Bologna, Italy. CODEN: 69HJYL; ISBN: 88-7587-070-5
DOCUMENT TYPE: Conference; (computer optical disk)
LANGUAGE: English
AB Features of the Th1 or Th2 phenotype start to develop during CD4 T cell priming, when dendritic cells (DC) present antigen to T cells. Divergent polarization of mouse Th responses to the same protein is exemplified by responses to the bacterial flagellar protein, FliC. This is strictly Th2 following immunization with soluble, recombinant (r) FliC or isolated bacterial flagellae. Conversely, when presented in its native context as flagellated live Salmonella a Th1 response is induced. The polarization of a native - non-transgenic - anti-FliC response is shown in situ by the way primed CD4 T cells induce class switching in FliC-specific B cells. The presence of FliC-specific plasma cells producing IgG2a (IgG2c in C57Bl/6 mice) reflects Th1 activity, while switching to IgG1 indicates Th2 activity. Thus soluble rFliC and polymerized FliC isolated from the surface of Salmonella predominantly induce IgG1 switching. Conversely, against FliC surface-bound to live, flagellated Salmonella, Th1-reflecting IgG2c is predominantly induced. Thus the intrinsic, innate immunostimulatory properties of the FliC mol. are insufficient to drive a Th1 immune response. Addnl., soluble rFliC is shown, like LPS, to be a potent upregulator of CD40 and CD86 on CD11c+ DC. By contrast LPS, but not rFliC upregulates the expression of CD40 and CD86 on B cells.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:653792 HCAPLUS Full-text
DOCUMENT NUMBER: 141:364779
TITLE: Differential regulation of membrane CD14 expression and endotoxin-tolerance in alveolar macrophages
AUTHOR(S): Lin, Shu-Min; Frevert, Charles W.; Kajikawa, Osamu; Wurfel, Mark M.; Ballman, Kimberly; Mongovin, Stephen; Wong, Venus A.; Selk, Amy; Martin, Thomas R.
CORPORATE SOURCE: Pulmonary Research Laboratories at the VA Puget Sound Medical Center, and the Division of Pulmonary/Critical Care Medicine, Department of Medicine, University of Washington School of Medicine, Seattle, WA, USA
SOURCE: American Journal of Respiratory Cell and Molecular Biology (2004), 31(2, Pt. 1), 162-170 CODEN: AJRBEL; ISSN: 1044-1549
PUBLISHER: American Thoracic Society
DOCUMENT TYPE: Journal

LANGUAGE: English
AB CD14 is important in the clearance of bacterial pathogens from lungs. However, the mechanisms that regulate the expression of membrane CD14 (mCD14) on alveolar macrophages (AM) have not been studied in detail. This study examines the regulation of mCD14 on AM exposed to Escherichia coli in vivo and in vitro, and explores the consequences of changes in mCD14 expression. The expression of mCD14 was decreased on AM exposed to E. coli in vivo and AM incubated with lipopolysaccharide (LPS) or E. coli in vitro. Polymyxin B abolished LPS effects, but only partially blocked the effects of E . coli. Blockade of extracellular signal-regulated kinase pathways attenuated LPS and E. coli-induced decrease in mCD14 expression. Inhibition of proteases abrogated the LPS-induced decrease in mCD14 expression on AM and the release of sCD14 into the supernatants, but did not affect the response to E. coli. The production of tumor necrosis factor-α in response to a second challenge with Staphylococcus aureus or zymosan was decreased in AM after incubation with E. coli but not LPS. These studies show that distinct mechanisms regulate the expression of mCD14 and the induction of endotoxin tolerance in AM, and suggest that AM function is impaired at sites of bacterial infection. OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS
RECORD (14 CITINGS)
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:636885 HCAPLUS Full-text
DOCUMENT NUMBER: 141:343958
TITLE: Cloning and expression of porcine adiponectin, and its relationship to adiposity, lipogenesis and the acute phase response
AUTHOR(S): Jacobi, S. K.; Ajuwon, K. M.; Weber, T. E.; Kuske, J. L.; Dyer, C. J.; Spurlock, M. E.
CORPORATE SOURCE: Department of Animal Sciences, Comparative Medicine Program, Purdue University, West Lafayette, IN, USA
SOURCE: Journal of Endocrinology (2004), 182(1), 133-144
CODEN: JOENAK; ISSN: 0022-0795
PUBLISHER: Society for Endocrinology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Adiponectin is an adipocyte-derived hormone that has been implicated recently in the regulation of inflammation in immunocytes, and in lipid metabolism and glucose homeostasis in liver, skeletal muscle and adipocytes. However, information in non-rodent models is limited. We have cloned and sequenced the porcine adiponectin open reading frame and evaluated the regulation of adiponectin in vivo following lipopolysaccharide (LPS) or E. coli administration. The porcine sequence shares approx. 88, 86, 85 and 83% homol. with the dog, human, cow and mouse adiponectin resp., and 79-83% similarity with dog, human, cow and mouse proteins at the amino acid level, based on the translated porcine sequence and GenBank submissions for the other species. Relative serum adiponectin concns. were not altered in pigs infused with E. coli, and mRNA expression in adipose tissue was not responsive to LPS. However, anal. of serum from very lean vs. a substantially fatter genotype of pig indicated that relative circulating adiponectin concns. are higher (P<0·01) in the lean pigs than in the fatter genotype, and that the difference is established relatively early in the growth curve. Also, incubating pig adipocytes for 6 h with recombinant pig adiponectin resulted in an approx. 30% reduction (P<0·05) in lipogenesis compared with adipocytes under basal conditions and with those incubated in the presence of insulin. This is the first report in any species that adiponectin antagonizes the incorporation of glucose carbon into lipid in the adipocyte, and provides addnl. evidence that adiponectin acts as an autocrine regulatory factor to regulate energy metabolism

OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:265342 HCAPLUS Full-text
DOCUMENT NUMBER: 138:319537
TITLE: Monocyte-derived RANTES is intrinsically elevated in periodontal disease while MCP-1 levels are related to inflammation and are inversely correlated with IL-12 levels
AUTHOR(S): Fokkema, S. J.; Loos, B. G.; Van Der Velden, U.
CORPORATE SOURCE: Department of Periodontology, Academic Centre for Dentistry Amsterdam (ACTA), Neth.
SOURCE: Clinical and Experimental Immunology (2003), 131(3), 477-483
CODEN: CEXIAL; ISSN: 0009-9104
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bacteria colonizing tooth surfaces are essential in the induction of an inflammatory response in the periodontal tissues, but do not cause periodontitis in everyone, implicating differences in the host immune response. These possible differences were studied using lipopolysaccharide (LPS)-stimulated whole blood cell cultures (WBCC), which revealed a down regulation of monocyte derived interleukin-12 (IL-12p70) in untreated periodontitis patients and an up regulation after therapy. IL-12p70 is a crucial factor in the differentiation of Th1 cell responses. Since CC chemokines are able to influence the T cell differentiation via cytokine secretion in antigen-presenting cells, the production of CC chemokines in periodontitis was evaluated. Therefore WBCC were stimulated with LPS from Escherichia coli for 18 h and the levels of IL-12p70 and CC chemokines were measured in the supernatants by ELISA. Untreated periodontitis patients released 2 fold more RANTES (regulated on activation normal T cell expressed and secreted) ($P = 0{\cdot}01$) and lower levels of IL-12p70 in comparison to controls ($P < 0{\cdot}05$). A trend towards higher levels of macrophage chemoattractant protein-1 (MCP-1) ($P = 0{\cdot}07$) was also seen in untreated periodontitis patients; while similar levels of monocyte derived chemokine (MDC) and macrophage inflammatory proteins-1α and -1β (MIP-1α and -1β) were found. After periodontal therapy no changes were seen with regard to MDC, MIP-1α, MIP-1β and RANTES, whereas the MCP-1 levels decreased ($P < 0{\cdot}05$) and the IL-12p70 levels strongly increased ($P < 0{\cdot}01$). The data showed a consistent inverse correlation between the levels of MCP-1 and IL-12p70, and their proportional changes after therapy correlated with the clin. inflammatory response after therapy. This indicates that the disease state regulates the release of IL-12p70 and MCP-1 in E . coli LPS-stimulated WBCC. In contrast, the persistent augmented levels of RANTES after therapy are suggestive for an intrinsic behavior.
OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:554529 HCAPLUS Full-text
DOCUMENT NUMBER: 137:139106
TITLE: Bacterium-induced CXCL10 secretion by osteoblasts can be mediated in part through Toll-like receptor 4
AUTHOR(S): Gasper, Nancy A.; Petty, Cynthia C.; Schrum, Laura W.; Marriott, Ian; Bost, Kenneth L.
CORPORATE SOURCE: Department of Biology, University of North Carolina at

Charlotte, Charlotte, NC, 28223, USA
SOURCE: Infection and Immunity (2002), 70(8), 4075-4082
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Two common pathogens known to cause bone infection, Salmonella and Staphylococcus aureus, were investigated to determine their abilities to induce chemokine expression in cultured mouse and human osteoblasts. While these cells are responsible for bone formation, the authors were surprised to find that they could respond to bacterial infection by upregulating expression of the chemokine CXCL10 (IP-10). However, there were significant differences in the abilities of the gram-neg. bacterium Salmonella and the gram-pos. bacterium S. aureus to induce expression of CXCL10. Reverse transcription-PCR and ELISA analyses showed high levels of Salmonella-induced CXCL10 mRNA and protein expression, resp., whereas the osteoblast response to S. aureus was significantly less. Consistent with these findings, Salmonella- derived lipopolysaccharide (LPS), but not S. aureus- derived peptidoglycan, could induce expression of CXCL10. An antibody against Toll-like receptor 4 (TLR4) could block the LPS-induced CXCL10 production, demonstrating the functional expression of TLR4 by osteoblasts. Despite the inducible nature of TLR2 mRNA expression by bacterium-infected osteoblasts, peptidoglycan failed to stimulate CXCL10 secretion. Immunofluorescent staining of bacterium-infected calvaria (i.e., skull bone) demonstrated the presence of CXCL10 in osteoblasts. The fact that osteoblasts did not express CXCR3 mRNA, whereas T lymphocytes can express high levels of this receptor, suggests that osteoblast-derived CXCL10 may recruit T lymphocytes to the sites of bone infections.

OS.CITING REF COUNT: 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)
REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:596518 HCAPLUS Full-text
DOCUMENT NUMBER: 137:306451
TITLE: Molecular cloning, gene organization, and expression of mouse Mpi encoding phosphomannose isomerase
AUTHOR(S): Davis, Joseph A.; Wu, Xiao-Hua; Wang, Ling; DeRossi, Charles; Westphal, Vibeke; Wu, Rongrong; Alton, Gordon; Srikrishna, Geetha; Freeze, Hudson H.
CORPORATE SOURCE: Glycobiology Program, The Burnham Institute, La Jolla, CA, 92037, USA
SOURCE: Glycobiology (2002), 12(7), 435-442
CODEN: GLYCE3; ISSN: 0959-6658
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Phosphomannose isomerase (PMI) interconverts fructose-6-P (Fru-6-P) and mannose-6-P (Man-6-P), linking energy metabolism to protein glycosylation. The authors have cloned the mouse Mpi cDNA, analyzed its genomic organization, and studied the expression in different tissues. The Mpi gene has eight exons covering 7.2 kb. The structure and intron-exon boundaries are essentially the same as its human ortholog with 85% amino acid identity. Mpi is alternatively spliced at the 3' end, resulting in three messages with different 3'-untranslated regions. Mpi expression is regulated at both the transcription and translation levels, with the highest expression level in testis. Rabbit antibodies prepared against mouse PMI expressed in E. coli recognize a single 47-kDa band. Immunohistochem. of mouse tissues shows general cytosolic staining in all cells. In testis, staining is intense in round spermatids and residual bodies, moderate in pachytene

spermatocytes, and weak in spermatogonia and spermatozoa. In contrast, northern blot anal. shows comparable transcripts of 1.8 and 1.6 kb in pachytene spermatocytes and round spermatids, suggesting delayed translation of PMI. The stage-specific expression of PMI in testis may be important for KDN synthesis, which requires Man-6-P, or it may be needed to ensure sufficient glycosylation precursors in cells that do not utilize glucose and instead rely on lactate and pyruvate. OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:662054 HCAPLUS Full-text

DOCUMENT NUMBER: 131:335603

TITLE: The intestinal microflora regulates cytokine production positively in spleen-derived macrophages but negatively in bone marrow-derived macrophages

AUTHOR(S): Nicaise, Pascale; Gleizes, Aude; Sandre, Catherine; Kergot, Roseline; Lebrec, Herve; Forestier, Francoise; Labarre, Colette

CORPORATE SOURCE: Department de Microbiologie et Immunologie, Unite Associee INRA Ecologie Microbienne du Tube Digestif et Sante, Paris, Fr.

SOURCE: European Cytokine Network (1999), 10(3), 365-372
CODEN: ECYNEJ; ISSN: 1148-5493

PUBLISHER: John Libbey Eurotext

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Besides its role as a barrier against potential pathogens, intestinal flora is presumed to protect the host by priming the immunol. defense mechanisms. In this respect, the influence of intestinal flora on macrophage precursors was examined, and its modulating effect was compared on LPS-induced cytokine production by macrophages derived from bone marrow and spleen precursors (BMDM and SDM resp.). The regulation of IL-1, IL-6, TNF-α and IL-12 production in macrophages from germ-free and from three groups of flora-associated mice, conventional, conventionalized and E. coli-mono-associated mice, was investigated. The whole flora inhibited IL-1, TNF-α and IL-12 secretion by BMDM, whereas it had a stimulatory effect on IL-12 secretion by SDM. Implantation of E . coli alone enhanced cytokine secretion by BMDM but had a more limited effect than whole flora on SDM, enhancing only TNF-α and IL-12 secretion. Study of expression of mRNA showed a correlation with protein secretion for IL-6 but not for TNF-α and IL-1. IL-12 enhancement in BMDM seemed to be dependent on regulation of p35 mRNA expression while it was correlated to increased p40 mRNA expression in SDM. The results demonstrated that intestinal flora modulated bone marrow and spleen macrophage cytokine production in a differential manner and suggested a role for bacteria other than E. coli among the whole flora. The contrasting effects exerted by the intestinal flora on bone marrow and spleen precursors are an interesting observation in view of the different functions of these organs in immunity. The finding that intestinal flora enhanced IL-12 production in spleen is also potentially important since this cytokine is implicated in the determination of the relative levels of Th1 and Th2 responses and plays a pivotal role in host defense against intracellular microorganisms. OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS

RECORD (14 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 18 OF 21 MEDLINE on STN
ACCESSION NUMBER: 1998017378 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 9376506
TITLE: Construction of a Salmonella typhimurium vaccine strain expressing Vibrio cholera CT-B and LPS-O antigen.
AUTHOR: Chen D; Ma Q
CORPORATE SOURCE: Institute of Biotechnology, Academy of Military Medical Sciences, Beijing, China.
SOURCE: Chinese journal of biotechnology, (1997) Vol. 13, No. 1, pp. 43-50.
Journal code: 9100855. ISSN: 1042-749X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199711
ENTRY DATE: Entered STN: 24 Dec 1997
Last Updated on STN: 24 Dec 1997
Entered Medline: 7 Nov 1997

AB The genes encoding V. cholera CT-B and LPS-O antigens were simultaneously inserted into the vector plasmid pYA248. The resulting recombinant plasmid pMG306 was transformed into the delta cya delta crp delta asd attenuated S. typhimurium vaccine strain x4072, and the live vaccine strain x4072 (pMG306) was constructed. This vaccine strain could secrete a specific CT-B antigen. Meanwhile, LPS-O antigens of both V. cholera and S. typhimurium were expressed on the cell surface. Mouse intraperitoneal immunization and subsequent challenge trial indicated that x4072 (pMG306) provided good protection against virulent V. cholera. This study has laid the foundation for the development of a new cholera-typhoid bivalent live oral vaccine.

L21 ANSWER 19 OF 21 MEDLINE on STN
ACCESSION NUMBER: 1997065056 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 8908606
TITLE: Lipopolysaccharides of Escherichia coli K12 strains that express cloned genes for the Ogawa and Inaba antigens of Vibrio cholerae O1: identification of O -antigenic factors.
AUTHOR: Hisatsune K; Kondo S; Iguchi T; Ito T; Hiramatsu K
CORPORATE SOURCE: Department of Microbiology, School of Pharmaceutical Sciences, Josai University, Saitama, Japan.
SOURCE: Microbiology and immunology, (1996) Vol. 40, No. 9, pp. 621-6.
Journal code: 7703966. ISSN: 0385-5600.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 6 Mar 1997
Last Updated on STN: 6 Mar 1997
Entered Medline: 27 Feb 1997

AB Structural and serological studies were performed with the lipopolysaccharide (LPS) expressed by Escherichia coli K12 strains Number 30 and Number 64, into which cosmid clones derived from Vibrio cholerae O1 NIH 41 (Ogawa) and NIH 35A3 (Inaba) had been introduced, respectively. The two recombinant strains, Number 30 (Ogawa) and Number 64 (Inaba), produced LPS that included, in common, the O-polysaccharide chain composed of an alpha (1-->2)-linked N-(3-

deoxy-L-glycero-tetronyl)-D-perosamine (4-amino-4,6-dideoxy-D-manno-pyranose) homopolymer attached to the core oligosaccharide of the LPS of E. coli K12. Structural analysis revealed the presence of N-(3-deoxy-L-glycero-tetronyl)-2-O-methyl-D-perosamine at the non-reducing terminus of the O-polysaccharide chain of LPS from Number 30 (Ogawa) but not from Number 64 (Inaba). Serological analysis revealed that Number 30 (Ogawa) and Number 64 (Inaba) LPS were found to share the group antigen factor A of V. cholerae O1. They were distinguished by presence of the Ogawa antigen factor B [co-existing with relatively small amounts of the Inaba antigen factor (c)] in the former LPS and the Inaba antigen factor C in the latter LPS. It appears, therefore, that Number 30 (Ogawa) and Number 64 (Inaba) have O- antigenic structures that are fully consistent with the AB(c) structure for the Ogawa and the AC structure for the Inaba O-forms of V. cholerae O1, respectively. Thus, the present study clearly confirmed our previous finding that the Ogawa antigenic factor B is substantially related to the 2-O-methyl group at the non-reducing terminus of the alpha (1-->2)-linked N-(3-deoxy-L-glycero-tetronyl)-D-perosamine homopolymer that forms the O-polysaccharide chain of LPS of V. cholerae O1 (Ogawa).

L21 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:31565 HCAPLUS Full-text
DOCUMENT NUMBER: 112:31565
ORIGINAL REFERENCE NO.: 112:5365a,5368a
TITLE: Regulated expression of proenkephalin A in normal lymphocytes
AUTHOR(S): Rosen, Haim; Behar, Oded; Abramsky, Oded; Ovadia, Haim
CORPORATE SOURCE: Fac. Med., Hebrew Univ., Jerusalem, Israel
SOURCE: Journal of Immunology (1989), 143(11), 3703-7
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The expression of proenkephalin A (PEA), a neuropeptide-encoding gene, was examined in normal rat lymphocytes. With the use of Northern blot hybridization anal. of total RNA, PEA mRNA was found in normal cells derived from spleen, lymph nodes, and bone marrow. Cell sorting of the 2 main fractions of B and T cells derived from the spleen revealed that PEA is expressed in normal B cells (sIg+). The expression of PEA mRNA was markedly enhanced after a short incubation (3 h) of cells with LPS or Salmonella typhimurium. This was not the case when these cells were incubated with Con A during the same period of time; whereas, in thymocytes the presence of PEA mRNA was exclusively dependent upon mitogenic stimulus (Con A) and could be detected after 24 h of in vitro incubation. Exts. of cells were also found to contain immune reactive enkephalins, indicating that the PEA mRNA is translated. These results support the concept that neuropeptides, such as enkephalins, have a role in the modulation of the immune response and may participate in the bidirectional communication between the nervous and immune systems. OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

L21 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:490879 HCAPLUS Full-text
DOCUMENT NUMBER: 109:90879
ORIGINAL REFERENCE NO.: 109:15151a,15154a
TITLE: Regulation of MHC expression in vivo. Bacterial lipopolysaccharide induces class I and II MHC products in mouse tissues by a T cell-independent, cyclosporine-sensitive mechanism
AUTHOR(S): Jephthah-Ochola, Jessica; Urmson, Joan; Farkas, Susan; Halloran, Philip F.

CORPORATE SOURCE: Div. Nephrol. Immunol., Univ. Alberta, Edmonton, AB, T6G 2R8, Can.
SOURCE: Journal of Immunology (1988), 141(3), 792-800
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of injections of bacterial LPS on the expression of class I and II products of the MHC in mouse tissues was investigated. In mice given two i.p. injections of LPS from Escherichia coli or Salmonella minnesota, there were increases in class I and II MHC products in kidney, liver, heart, lung, and pancreas. Focusing on the changes in kidney, it was demonstrated that the increase in MHC expression occurred in tubules and, in the case of class I, in glomeruli. LPS treatment also increased the deposition of Ig in glomeruli. Time course studies indicated that increased class I expression could be induced by a single LPS injection, whereas class II induction required a second injection. The induction was influenced by the LPS sensitivity of the mouse strain, being much greater in LPS-sensitive C3H/HeSn mice than in LPS-resistant C3H/HeJ mice. T cells were not required. Nevertheless, the effect of LPS was inhibitable by cyclosporine and by a mAb against interferon-γ (IFN-γ) indicating that IFN-γ was required for the MHC induction. OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS

RECORD (22 CITINGS)

SEARCH HISTORY

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     (FILE 'HOME' ENTERED AT 17:22:25 ON 21 SEP 2009)

     FILE 'HCAPLUS' ENTERED AT 17:22:48 ON 21 SEP 2009
               E CURTISS III ROY/AU
               E CURTISS ROY/AU
L1          216 SEA ABB=ON  ("CURTISS ROY"/AU OR "CURTISS ROY III"/AU)
L2            9 SEA ABB=ON  L1 AND ?LIVE?(W)?VACCINE?
L3            2 SEA ABB=ON  L2 AND ?CROSS?(W)?PROTECT?
L4              ANALYZE L3 1-2 CT :       9 TERMS
L5       182203 SEA ABB=ON  ?SALMONELLA? OR E(W)?COLI?
L6        33841 SEA ABB=ON  L5 AND (?LIVE? OR ?ATTENUAT? OR ?DERIV?)
L7          744 SEA ABB=ON  L6 AND ?REGULAT?(5A)?EXPRES?
L8          744 SEA ABB=ON  L7 AND (?REGULAT? OR ?PROMOT? OR FUR OR ?INTEST?
                OR ?EXPRES?)
L9          189 SEA ABB=ON  L8 AND (?CARBOHYDRAT?(W)?ANTIGEN? OR IN(W)?VIVO?
                OR ?CROSS?(W)?PROTECT? OR ?IMMUN?)

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               E LPS O/CN
               E LPS-O/CN

     FILE 'HCAPLUS' ENTERED AT 17:30:47 ON 21 SEP 2009
L10          42 SEA ABB=ON  L8 AND LPS
L11          21 SEA ABB=ON  L9 AND LPS
L12           1 SEA ABB=ON  L11 AND O(W)?ANTIGEN?
L13           0 SEA ABB=ON  L11 AND PMI
L14           1 SEA ABB=ON  L9 AND PMI
L15           2 SEA ABB=ON  L12 OR L14
L16          22 SEA ABB=ON  L11 OR L12 OR L14
L17          18 SEA ABB=ON  L16 AND (PRD<20070418 OR PD<20070418)

     FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 17:34:12 ON 21 SEP 2009
L18         114 SEA ABB=ON  L17
L19         114 SEA ABB=ON  L18 AND (LPS OR PMI)
L20           3 SEA ABB=ON  L19 AND O(W) ?ANTIGEN?

     FILE 'HCAPLUS, MEDLINE' ENTERED AT 17:35:58 ON 21 SEP 2009
L21          21 DUP REMOV L17 L20 (0 DUPLICATES REMOVED)

     FILE HOME

     FILE HCAPLUS

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     FILE LAST UPDATED: 20 Sep 2009  (20090920/ED)
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